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## HOW TO PRUNE YOUNG LOCUST AND CATALPA TREES

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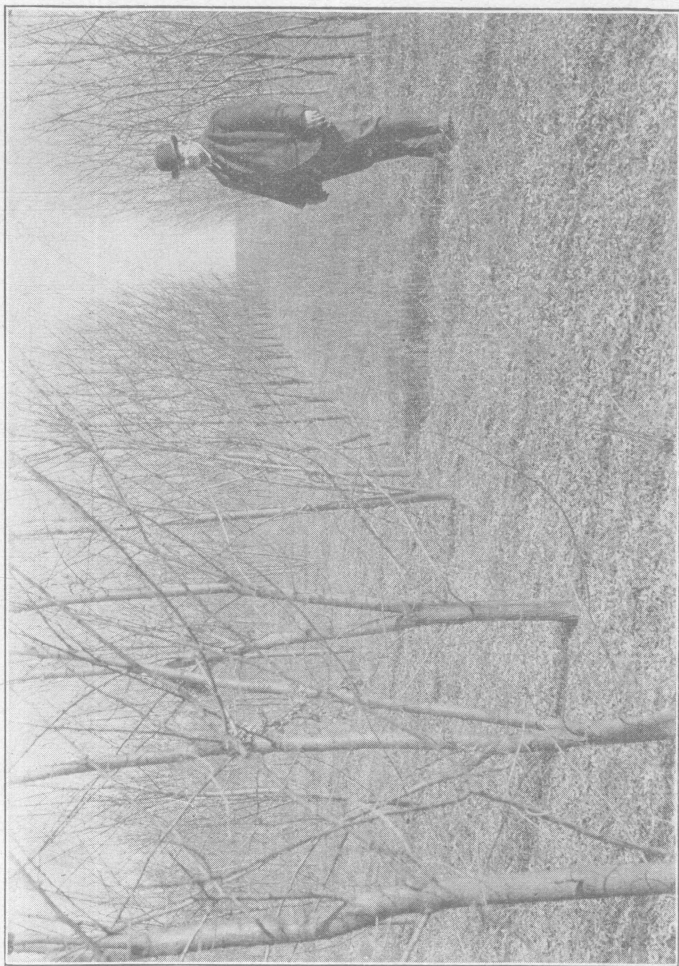
### LOCUST

Locust trees are nearly self-pruning. However, a very large percent of the trees, if left without pruning, will form forked trunks. By doing a very little pruning at the right time practically all of the forked trunks can be prevented.

Figure 1 shows four-year-old locust trees which have not been pruned, as the numerous forked trunks indicate. Figure 2 is from a photograph of trees in the same plantation as those shown in Figure 1, but which have been pruned sufficiently, as indicated by the straight bodies comparatively free from forks.

Forked trunks should be prevented, not only because such trees do not work into posts to as good advantage as those which are not forked, but because there is danger of the trees being injured by splitting at the crotch and also because of the protection which a crotch affords to insects and fungi.

In most cases the trunk of a locust tree will be forked at but one place, thus in order to avoid a forked trunk all the pruning that is necessary is to remove one of the branches of the fork. The small limbs on the main body of the tree need not be removed, except the lower ones which interfere with cultivation. They serve a useful purpose in shading the soil and helping to increase the size of the trunk of the tree. This pruning may be done at any time during the dormant period in the growth of the tree, but the most satisfactory time for this work, taking all things into consideration, is late winter or early spring.



*Photo. by Waid.*

Fig. I. Unpruned four-year-old locust trees. Compare with Figure II.

## THE CATALPA

The catalpa differs from the locust in the fact that while the branches die, they do not fall off, even when planted as closely as 4 by 4 feet. The terminal bud of the young catalpa is often winter-killed, thus hindering a straight upward growth of the trunk. Hence, in order to secure the best results with the catalpa, it is necessary to do some pruning.

The most satisfactory method which has been put into practice up to the present time, has been to do no pruning for two or three years and then to cut the trees off at the surface of the ground. Only one sprout is allowed to grow from each stump. One of the advantages of this method of pruning is that it requires less time than any other. It is also the easiest method by which the trees can be made to grow with straight trunks. The young trees when cut can be used to good advantage as bean poles or for other purposes.

It has been demonstrated that when trees are cut off at 2 or 3 years of age, they will grow enough faster the following two or three years, owing to the fact that the entire root system of each tree is brought into play in forcing the growth of one sprout, to nearly or quite catch up in size with trees of the same age which have not been so treated.

No side branches will form on the first year's growth, thus the taller the sprouts grow the first season the less pruning will be necessary thereafter. The height which the sprouts will attain the first season after the trees are cut off depends largely upon the previous root growth. It is important, therefore, that the root growth be good before the trees are cut off. On very fertile soil and with good cultivation the growth may have been sufficiently strong to warrant cutting the trees off the first year after they are planted. This was the case with the trees shown in Figure 3, which were planted in 1903 and cut off at the surface of the ground in 1904. The photograph was taken in the fall of 1905 thus showing two seasons' growth after being cut off. This is exceptional, and in a majority of cases the trees should not be cut off until the second year after they are planted. When the growth has been poor it is advisable not to cut them off until the third year after planting. The proper time of the year to cut the trees off is in late winter or early spring, before growth begins.



*Photo. by Waid.*

Fig. II. Locust trees in the same plantation as those shown in Figure I. The trees have been pruned sufficiently as the straight trunks indicate.

They may be cut off with a sharp ax or with a saw. In either case they should be cut off as near to the ground as can be done conveniently. As soon as the sprouts are ten or twelve inches high all but one at each stump should be broken off. One of the strongest sprouts from each slump should be left and, if possible, it should be on the side of the stump toward the prevailing wind. Care should be taken not to disturb the bark when removing the sprouts. It is a good plan to bank dirt about the sprouts to a depth of 5 or 6 inches to lessen the danger of the sprouts being blown over by the wind and to assist them in getting established.

No other pruning need be done the first season after cutting the trees off and very little will be needed for several years. If the trees become top-heavy at any time some of the limbs must be removed. All branches which interfere with the upright growth of the leader or central limb should be cut off when they are small.

When any one has taken pains to prune the young tree so that it has a straight trunk there is little advantage in cutting it off. Such a tree will ordinarily need more attention in the matter of pruning than a tree that has been cut off and allowed to grow up again from the stump, because it will have more side branches near the ground. Care should be taken not to prune it too severely, however, as the removal of two many limbs when the tree is small will result in a weak trunk growth.

Trees with weak trunks are often bent over, during heavy rainstorms, by the weight of the foliage and they do not always recover their normal position. The only thing to do in such a case is to cut the trees off at the surface of the ground the following spring and allow them to renew themselves from the stump. Trees which have been injured by mice or rabbits gnawing the bark off, should be treated in the same manner.



*Photo by Ballou.*

Fig. III. A three-year-old catalpa grove. Trees cut off at the ground one year after planting; showing a growth of two years.